Claims

1. A method of transmitting a block of digital data, the method comprising:

processing first and second data flows in first and second manners to produce first and second processed data flows;

concatenating data from the first and second processed data flows and a code identifying said manners to produce a block of concatenated data;

interleaving said block; and

transmitting said block.

2. A method according to claim 1, including establishing data representing a set of processing manners, said data defining a block size and a transmission time therefor for each processing manner, wherein the depth of said interleaving corresponds to a transmission time not greater than the least of said defined transmission times.

3. A method of transmitting a block of digital data, the method comprising:

establishing data representing a set of processing manners, said data defining a block size and a transmission time therefor for each processing manner,

processing at least one data flow, the or each data flow being processed according to manners selected from said set of processing manners;

concatenating data from the or each data flow and a code identifying said selected manner or manners to produce a block of concatenated data;

interleaving said block; and

transmitting said block,

wherein the depth of said interleaving corresponds to a transmission time not greater than the least of said defined transmission times.

4. A method according to claim 2 or 3, wherein said defined transmission times are integer multiples of the transmission time corresponding to said interleaving depth.

5. A method according to claim 2, 3 or 4, including receiving a signal defining said set of processing manners.

6. A method according to claim 5, including storing data representing a plurality of processing manners and selecting from said stored data in response to said signal defining said set of processing manners.

7. A method according to any one of claims 2 to 6, wherein each processing manner includes an interleaving process definition.

8. A method according to claim 7, wherein interleaving according to an interleaving process definition is only performed if the transmission time of the same processing manner is greater than the least of the transmission times of said set.

9. A method according to any preceding claim, wherein said block is transmitted by radio waves.

10. A transmitter for transmitting blocks of digital data, the transmitter comprising processing means configured to:

process first and second data flows in first and second manners to produce first and second processed data flows,

concatenate data from the first and second processed data flows and a code identifying said manners to produce a block of concatenated data, and

interleave said block; and

transmitting circuitry for transmitting said block.

11. A transmitter according to claim 9, wherein the processing means includes a memory storing data representing a set of processing manners, said data defining a block size and a transmission time therefor for each processing manner, and the processing means is configured such that the depth of said

interleaving corresponds to a transmission time not greater than the least of said defined transmission times.

12. A transmitter for transmitting blocks of digital data, the transmitter comprising processing means including a memory storing data representing a set of processing manners, said data defining a block size and a transmission time therefor for each processing manner, wherein the processing means is configured to:

process at least one data flow, the or each data flow being processed according to manners selected from said set of processing manners;

concatenate data from the or each data flow and a code identifying said selected manner or manners to produce a block of concatenated data;

interleave said block; and

transmit said block,

wherein the depth of said interleaving corresponds to a transmission time not greater than the least of said defined transmission times.

13. A transmitter according to claim 11 or 12, wherein said defined transmission times are integer multiples of the transmission time corresponding to said interleaving depth.

14. A transmitter according to claim 11, 12 or 13, including a receiving means for receiving a signal defining said set of processing manners.

15. A transmitter according to claim 14, wherein the processing means includes a memory storing data representing a plurality of processing manners and the processing means is configured for selecting from said stored data in response to said signal defining said set of processing manners.

16. A transmitter according to any one of claims 11 to 15, wherein each processing manner includes an interleaving process definition.

17. A transmitter according to claim 16, wherein the processing means is configured such that the interleaving according to an interleaving process definition is only performed if the transmission time of the same processing manner is greater than the least of the transmission times of said set.

18. A transmitter according to any one of claims 10 to 17, wherein transmitter circuitry comprises radio transmitter circuitry.

19. A mobile phone according to any one of claim 10 to 18.

20. A base station for a mobile phone network including a transmitter according to any one of claims 10, 11, 12, 13, 15, 16 and 17.